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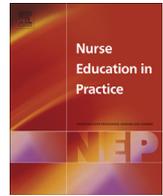
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Midwifery Education in Practice

Evaluation of an online master's programme in Somaliland. A phenomenographic study on the experience of professional and personal development among midwifery faculty



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ABSTRACT

To record the variation of perceptions of midwifery faculty in terms of the possibilities and challenges related to the completion of their first online master's level programme in Sexual and Reproductive Health and Rights in Somaliland. The informants included in this phenomenographical focus group study were those well-educated professional women and men who completed the master's program. The informant perceived that this first online master's level programme provided tools for independent use of the Internet and independent searching for evidence-based information, enhanced professional development, was challenge-driven and evoked curiosity, challenged professional development, enhanced personal development and challenged context-bound career paths. Online education makes it possible for well-educated professional women to continue higher education. It furthermore increased the informants' confidence in their use of Internet, software and databases and in the use of evidence in both their teaching and their clinical practice. Programmes such as the one described in this paper could counter the difficulties ensuring best practice by having a critical mass of midwives who will be able to continually gather contemporary midwifery evidence and use it to ensure best practice. An increase of online education is suggested in South-central Somalia and in similar settings globally.

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Introduction

In this study we recorded the variations of perceptions, referred to as conceptions in phenomenographic writing (Marton, 1981, 1986), of midwifery informant in terms of the possibilities and challenges related to the completion of their first online master's level programme in Sexual and Reproductive Health and Rights (SRHR) in Somaliland.

Somaliland is one of three regions in Somalia: Somaliland,

Puntland and South Central Region (UNPOS, 2013). In Somalia, Traditional Birth Attendants (TBA) attends 80% of women birth at home, while Skilled Birth Attendants (SBA) attends 20% birth in health facilities (MoHP, 2015). Somalia has one of the highest maternal (732/100 000) and child (137/1000) mortality ratios worldwide (The World Bank, 2015a; 2015b). One key issue is the shortage of qualified healthcare providers. During the civil war there was a dramatic loss of qualified healthcare providers, reflected in a ratio of two midwives per 100 000 people. The effects of the war led to large-scale migration of nurses and midwives mainly to nearby countries, United Arab Emirates, North America, United Kingdom and Scandinavia (WHO, 2014). In Somalia, midwifery has been a separate profession since the 1950s, and remains so today despite the civil war in the 1990s (WHO, 2014). In Somalia, midwifery is a post-nursing qualification and a distinct profession

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as per international standards (ICM, 2010).

Somaliland is a self-declared country, with a population of approximately 3.5 million. The Somaliland Nursing and Midwifery Association (SLNMA) was founded in 2004 as a membership organization to promote nursing and midwifery and to assist in the development of high-quality care through education and regulation. SLNMA has until date approximately 350 members and plays an important role in the standardization of midwifery education. SLNMA is one of more than 100 midwifery associations represented by the International Confederation of Midwives (ICM). The ICM standards for midwifery education with a set of quality indicators for global expectations (ICM, 2013) have been met by the four midwifery institutions/universities providing midwifery training in Somaliland. The minimum education level required for entrance into nursing is 12 years of schooling; nurses can enter the field of midwifery upon completion of an 18-month postgraduate diploma programme in midwifery. For more than two years now, the career path for nurses and midwives has included bachelors and master's degrees. SLNMA has furthermore agreed, together with the universities in 2012, that a midwifery career path should include PhD studies preferably through on-line education from Swedish universities. The career path is supposed to ensure that the midwifery profession retains its status as a distinct profession. Therefore, the minimum qualification required for being a faculty/director of a programme in midwifery was set at a bachelor's degree in midwifery (MoHP, 2015). At the time of writing, some 250 diploma midwives, 21 bachelor-degree-level midwives and 24 newly graduated master-degree-level midwives serve the population in Somaliland. For a sustainable provision of high-quality midwifery informant and leaders, the Somaliland Government's National Gender Policy 2009–2012 emphasized the importance of qualified midwives and midwifery educators. A priority to upgrade midwifery faculty and leaders to the master level was thus in line with the Government's gender policy. The Ministry of Health in Somaliland has made great efforts to re-open midwifery institutes to address the demand for educated midwives. However, midwife educators were found to be inadequate in terms of both number and quality (MoHP, 2015) when attempts were made to re-establish this core health profession and have educated, regulated midwives that met with international standards (ICM, 2010).

Online master-level training in midwifery (SRHR) offered the possibility for the faculty to come together in teams around the computer at the universities. This approach of educating midwives and midwifery educators online has been presented as innovative not only for theoretical education but also for clinical practice, inter-professional collaboration, health-policy development, and for global health reporting (Reis et al., 2015). In the Lancet series on midwifery, innovative approaches have been identified as necessary if the sustainable development goal of fewer than 70 maternal deaths per 100 000 livebirths in 2030 through the provision of maternity care to the population in terms of both quantity and quality is to be achieved (Koblinsky et al., 2016; Renfrew et al., 2014).

To address the need for educated and regulated midwives that meet with international standards, Dalarna University in Sweden piloted a one-year online master's programme in SRHR in collaboration with two public universities in Somaliland. The programme ran over a period of two years with the first group of 24 faculty graduating in September 2015. After this group had completed the first online master's programme for midwifery faculty in Somaliland, it was important to examine the possibilities and challenges it presented. This, while keeping in mind the fact that online education at the master's level might be a unique and innovative approach to building capacity of midwifery informant on a broad front internationally (Koblinsky et al., 2016; Renfrew et al., 2014).

The aim of this study, therefore, was to record the variation of perceptions of midwifery faculty in terms of the possibilities and challenges related to the completion of their first online master's level programme in SRHR in Somaliland.

Method

Design

The informants included in this phenomenographical focus group study were those well-educated professional women and men who recently graduated from the first online master's programme in SRHR in Somaliland. In this study, we recorded the variations of perceptions, referred to as conceptions in phenomenographic writing (Marton, 1981, 1986). Ethical approval was obtained from the University of Hargeisa Ethical Board in 2013. In the study, we followed the guidance of the Belmont Report (Miracle, 2016) regarding ethics, as based on the Helsinki Declaration. In the findings section, the informants are identified by a letter, to maintain their confidentiality.

A brief overview of the master's programme

Initial phase

The use of online technology in midwifery faculty training was a relatively new phenomenon in 2010–2012 (Reis et al., 2015) when Dalarna University identified the potential with online technology to increase the number of midwifery faculty and target specific skills gaps. The project built on collaboration between Dalarna University and two universities in Somaliland, SLNMA, and governmental ministries in Somaliland. Context-specific curricula and syllabi for the online midwifery faculty master's programme were developed. The midwifery faculty were at that time novice users with online learning and their experiences were investigated and published in 2015 (Omer et al., 2015).

Implementation phase

Activities were overseen by a steering committee on a quarterly basis over the years to assess the master's programme in terms of targets and to document lessons learnt. Evaluations were undertaken in each course. Dalarna University provided technical support, including online teaching and library resources, in order to build capacity. Live-streamed and pre-recorded lectures, together with online virtual meetings in seminars, were provided. The activities in each course were monitored using a learning platform and a plagiarism tool. By using online learning platforms and with the support from a team at Dalarna University, 80% of the teaching and learning was online. For the remaining 20%, meetings were held at the local university with the local coordinator for the project. Faculty at Dalarna University travelled to Somalia three times each year and spent a few weeks there to provide support for the examinations and to help with the introductions to upcoming courses. During the visits, the Swedish faculty also supported the Somaliland universities with IT support staffs, and attended steering committee meetings. The Somaliland universities were initially provided with mobile Internet and at a later stage, broadband access was introduced. There was a choice to study from home; however, Internet connectivity was provided free at the universities.

Structure and content of the master's program

A master program for midwifery faculty could be of one or two

year's duration. This one-year master's programme included five *core courses* with the content of SRHR, maternal and child health, teaching and learning, leadership and management, evidence based practice and research. Two courses were degree courses with the content of research methodology and thesis writing skills. The leading principal was student-centered reciprocal learning and cultural humility. Further, professionalism and leadership, partnership with women, competence in practical skills and knowledge, critical thinking, and decision-making skills pervaded the masters' program.

The informants

At the time of their enrolment in the master's programme in 2013, the midwives all held a bachelor's degree in either nursing or midwifery. They had been employed for one to 15 years as educators and/or clinical supervisors in private hospitals, government hospitals or MCH clinics, or held a management position within government services or at NGOs that provided reproductive health services. Throughout the duration of the master's programme, they could continue working since the studies were on a part-time basis. After obtaining their master's degree, the graduates were employed as educators and lecturers by the universities and as tutors and capacity builders by professional associations and government services.

Data collection

In May 2016, eight months after their graduation, the research team consisting of former teachers and the coordinator in the master's program contacted the well-educated professional women and men who graduated from the first online master's programme in SRHR in Somaliland. The potential informants were informed about the study and asked if they would like to participate in focus group discussions. In June 2016, data were collected in three focus group discussions (McLafferty, 2004) with five to eight informants in each (18 informants in total). Of the 24 informants, one was out of the country, three were conducting fieldwork, one was in a maternity ward due to pregnancy complications and another had just given birth. Of the 18 informants in the discussions, two were male. The remaining 16 were female and they were aged between 27 and 43. The focus groups' discussions were arranged to take place at a local hotel in Hargeisa during the last visit to the country for the Swedish faculty. Before the focus groups gathered, the informants received written information about the method for data collection and the issues that would be discussed. Informed oral and written consent was obtained from the informants before the focus group discussion started. The focus groups were led by two members of the research team (FO, KE). One acted as moderator (FO) and the other as observer (KE) (McLafferty, 2004). The focus groups were made up of the well-educated professional women and men who had eight months earlier graduated from the first online master's programme in SRHR in Somaliland and currently holding different positions within society, and hence had autonomy to speak freely to the moderator of the focus group discussion. With the focus groups, an interview guide was used that listed the topics (McLafferty, 2004). The topics were explorative and focused on the informants' various perceptions in terms of the possibilities and challenges related to the completion of the first online master's programme in SRHR in Somalia. The possibilities and challenges with 1) specific courses, 2) the master's programme with respect to different aspects of their lives, 3) how the programme presented for the development of their society, and 4) how the programme presented with the fact it

was online. The informants talked freely, and, if necessary, the moderator asked follow-up questions so that they would elaborate on their experiences – questions such as “please describe how you perceived this ...” and “what do you think about that?” The observer added questions for clarification: “please explain ...” and took notes. The focus group discussions lasted for 120 min and were tape-recorded. The tape recordings were transcribed verbatim by the moderator (FO). The moderator was fluent in Somali and Swedish. The language for data collection was preferably English with Somali explanations whenever appropriate.

Analysis

The analysis is based on the phenomenographical method originally developed by Ference Marton (1981, 1986) for the field of learning. According to Marton (1981, 1986), conceptions can explain the sum of the individual's experiences: i.e., perceiving something is equal to summing up one's experiences in a conception. In the analysis, different aspects of reality perceived by different people are the focus: what questions and how questions are put to the informants.

The analysis was conducted in steps. As recommended by Marton (1986, p 43) first criteria of relevance were identified in step one to three, then in step four to seven as recommended by Marton (1986, p 43) turning the attention to all of the conceptions together as a pool of data. Categories are both iterative and interactive.

1. 'Familiarization': the transcripts from the focus group discussions were read so that we would become familiar with the content.
2. 'Identification of conceptions': we identified 238 variations of conceptions relating to the aim of the study.
3. 'Condensation': each conception was examined and its meaning refined by condensing the text with the perceived meaning.
4. 'Grouping topics': the condensed conceptions were appropriately grouped into an initial grouping. This was done by labelling the conceptions and by grouping different conceptions that appeared to be similar in meaning under the same topic.
5. 'Comparing conceptions under topic headings': the texts grouped under the topic headings were compared. The variations of conceptions were compared. Similar conceptions were put together and named in line with the core collective conception of the various perceptions.
6. 'Collective description' of the core of the collective conceptions was developed.
7. 'Contrasting comparison' included reading and re-reading the outcome description in order to ensure that the contrast of the variations of the collective conceptions was obvious. The collective descriptions are described in the section entitled Findings.

One informant listened to all the tape recordings through and read the analysed text before finalization of the descriptions to ensure confirmability (Polit and Beck, 2012). In addition, the research team and one informant all agreed on the descriptions before finalization.

Findings

Six collective conceptions were identified describing the first online master's level programme in SRHR. Tools were provided for independent use of the Internet, independent searching for evidence-based information and enhanced professional development. The program was challenge-driven and evoked curiosity

among the faculty challenged informant professional development, enhanced personal development and challenged context-bound career paths. Online education enhanced the possibilities for well-educated professional women to continue higher education.

The first collective conception, “The online master's programme provided tools for independent use of the Internet and independent searching for evidence-based development”, was represented by two categories: “Evidence-Based Information and Latest Evidence” and “Flexible Learning”.

Evidence-based information and latest evidence

During the master's programme, the informants used computers and the Internet for accessing information as well as the latest information related to evidence-based midwifery care. During their studies, the use of the Internet became a familiar daily activity. They conveyed the significance of being provided with the tools for and knowledge on how to use the Internet and on how to use it to search for relevant information. Their confidence in relation to the use of the Internet, software and academic databases increased and developed during their studies. In the courses, they needed to search for peer-review articles in academic databases such as CINAHL and Pub-Med, and expressed a strong will to continue to do so.

“I work more than ten hours a day. Then I go home and I relax. I use Facebook for a while; then I use the web to search for new evidence. I try to find the latest articles in my field of work.” (Informant, O)

Flexible learning

The informants reported how they felt confused during the first courses because they were not used to the student-centered educational and reciprocal learning style; nor were they used to using computers and the Internet in their studies. However, they gradually felt able to adapt to this new way of flexible learning.

“The first year it was difficult to use the [academic] database, but I tried hard. The more I tried, the better I felt. It takes time, not minutes, it takes hours, how to do research, how to get information.” (Informant, A)

The informants felt they had adapted to a learning style that they perceived to be beneficial as they could be flexible in their learning. At the time of the focus group discussions, they searched for online PhD studies and other post-graduate online courses.

“We are expecting to get an online PhD education, and we are expecting you to advocate for us and for online courses and education.” (Informant, O)

They could see many advantages with online courses and education. There is no need for a teacher to stand at the front of the class, and this led to their feeling of independence: it helped them manage their time while being able to search for teaching materials online. In this way, they kept themselves constantly updated on best practice. Online education was also beneficial to well-educated professional women who had family responsibilities. They felt that the flexibility of the online education enhanced gender equality.

“I had two children during my time as a student in the master's programme. I learnt about time management. Online education is a gender issue. It is the only opportunity for a woman like me.” (Informant, B)

The second collective conception, “The online master's programme enhanced professional development, was represented by two categories: “Teaching and Learning Style” and “Theory into Practice”.

Teaching and learning style

The informants' perception was that prior to taking the programme, the graduates gave tutorials that involved the passing on of information to their students: this practice was also evident in their course content. The delivery of the master's programme contrasted with their own teaching style. After completing the master's programme, the midwifery informant's own teaching came to be about reaching learning outcomes and goals, and about activating their students to achieve a particular learning outcome and objective of a course.

“You should have a clear title; you should have an objective, learning outcomes that you want the students to achieve in the course. I received some good knowledge (during the master's programme) about how to prepare a course, how to prepare a lecture. That is what I loved.” (Informant, C)

The informants also reported how they developed the content of the topic they taught based on scientific articles and e-books provided by the Dalarna University library. Best practice and latest evidence was taught in the light of ethical, cultural, social and political influence. They felt that their learning style had changed because of taking the master's programme, and they wanted to introduce online courses in higher education in Somaliland.

“I would like to introduce pre-recorded lectures and put them on a learning platform so that my students can listen to my lectures when they are at home.” (Informant, P)

Theory into practice

The informants gained knowledge and understanding as to how the gap between theory and practice could be reduced in their own theoretical teaching and clinical supervision. They had adjusted to a more student-centered learning style in their teaching and supervision with a focus on how to put theory into practice. Before their enrolment in the master's programme, their educational style could be described as one-way communication in passing on clinical skills. Upon completion of the master's programme, they discussed subjects and issues with their students, engaged them and motivated them as to why it was important to gain theoretical knowledge and put it into practice by working according to what they learn in specific caring situations.

“If we feed them (the students), they need to get more (feeding). Instead, we give them the tools to find information online. We practice together with them in clinical placements. We talk to them about theory. We also give them space in what we call resource seminars, where they can ask about everything that they were unable to find the answers to from their own reading and about the obstacles, they face in clinical placements, such as the way we have been taught in the master's programme. The students like the course now, just as much as we do.” (Informant, D)

The third collective conception, “The online master's programme was challenge-driven and evoked curiosity among the faculty”, was represented by two categories: “Informal Meetings”

and “Appointed to Reflect with Colleagues”.

Informal meetings

The informants' perception was that they could enhance critical thinking among their colleagues. In informal meetings, their colleagues approached them and discussed different topics, and they gladly shared issues related to women's rights, gender perspectives and family planning. The informants' perception was that their colleagues felt challenged in a positive way to find out more, and were curious about and interested in new teaching and learning styles.

“He asked me to send my PowerPoints. After I taught the student using my PowerPoint, he called me and said: ‘You organized it well and I would like to do as you do using a course outline, lecture outline and listing the course objectives. When I give a lecture now, I will also go and search. So searching is most important now.’” (Informant, P)

Appointed to reflect with colleagues

The informants' perception was that they were appointed by their employer to reflect with colleagues after their graduation.

“When we travel to the field and meet with colleagues in workshops, we talk about maternal and new-born mortality and morbidity, and discuss and provide information about what actions need to be taken to reduce it.” (Informant, F)

The transfer of knowledge would gradually contribute towards change they perceived: *“Insha Allah, we will try to change some things despite the difficulties.”* (Informant, L)

The fourth collective conception, “The online master's programme challenged professional development”, was represented by two categories: “Work Without Thinking, Please” and “Critical Thinking”.

“Work Without Thinking, Please”

Based on experiences, the informants' perception was that the main challenge in terms of professional development was when they worked at clinical sites as supervisors of midwifery students, and not at the institute/university. The following response from an informant conveys the significance of the challenge:

“One of my colleagues said, still you are a midwife, there is no difference with your degree, with your master's degree – you are still a midwife! Midwife! Midwife!” (Informant, G).

They wanted to use best practice and evidence-based knowledge in their clinical work as midwives. The informants believed that the hospital managers and doctors would benefit from using the well-educated professional midwives' knowledge more at clinical sites and that this would benefit the patients. They perceived a nurse or midwife should simply do his/her daily tasks without any question. That is what they are paid for, they were told by the managers. However, they felt that the master's degree had changed their professional relationship with a woman and her family. This became evident in partnership with women and in how they provided information and education. They now provided more comprehensive health education to the new mothers based on evidence before discharging them after a birth, and if they had

time, they offered awareness sessions in SRHR to the women and her family in the maternity ward.

“Before (the master's programme), we felt ashamed when we talked to patients and groups and men, but now (after the master's programme) we talk to the mothers more than before. Because we have the knowledge we talk to them, to groups, to men.” (Informant, H)

However, they had to conform to the requirements of the management at the workplace: *“I try not to think, try just to do as I get told. That is what the managers want from me.”* (Informant, I) If the manager is a person who understands the benefit of critical thinking and decision-making ability it is easier, they concluded. They thought it was a matter to get a change. A generation shift in the management structure in Somaliland could diminish the dilemma of being highly educated and yet not enabled to use knowledge and skills in clinical settings.

Critical thinking

The informants saw improvements in their own critical thinking as a great opportunity. After completing the master's programme, they found themselves able to more easily identify gaps and possible improvements in the areas of SRHR. Critical thinking was a core issue in the master's programme.

“We are going to change some things, we are different now than before we got the master's degree. I myself experienced a great change. When I meet the director at the hospital and he tells me something, or when I read something, I try to find out through searching who said it, who talked about it. I try to find the reference and not just believe and do what he told me.” (Informant, B)

However, the informants felt that critical thinking was not always valued, but their own mindset had changed and it was difficult not to use their newfound capacity.

The fifth collective conception, “The online master's programme enhanced personal development”, was represented by two categories: “Self-Confidence” and “Equal Human Rights”.

Self-confidence

The informants' perception was that they gained self-confidence by managing to attain a master's degree by taking the online programme. They had gained the self-confidence necessary to manage a variety of teaching, learning, clinical and even personal situations to a higher extent than was the case before the programme. They searched for valid information on the Internet when they faced a situation in life that they needed to investigate. When, for instance, a family member or child got sick, they used the Internet to investigate symptoms, medication, and prognosis, and so on. *“When my baby got sick, I searched on the Internet.”* (Informant, G)

They also used the computer for writing up proposals and job applications, CVs and budget proposals. *“I tried to develop two proposals and I won the bid thanks to my self-confidence in searching and writing.”* (Informant, E)

Equal human rights

The informants stated that they had started to problematize aspects of human rights in Somaliland and in the world regarding inequalities between the poor and the rich, and between women and men.

"I can search and compare Somalia country knowledge regarding maternal mortality rate and neonatal mortality rate with other countries: I can read and understand it has to do with women's rights and make myself aware of the world outside and get ideas for how we can improve." (Informant, I)

The informants also talked to their family members and friends about inequalities and possibilities in the area of SRHR for various groups in society. Their perception was that educational opportunities in Somaliland, as well as in other countries, were not equal between boys and girls. They tried to make their family, friends and colleagues realize that more boys attend primary school and universities than girls do.

"The inequality between boys and girls, men and women was an 'eye opener' for me during my studies at the master's level." (Informant, F)

The male informants also felt that they, as graduates, should strive for equal human rights in the future.

"There were two applicants, a man and a woman. I told the manager to look into the applicants' qualifications and their level of education and not only go for the man." (Informant, P)

The sixth collective conception, "The online master's programme challenged context-bound career paths", was represented by two categories: "Management and Leadership Skills" and "Respect in Society".

Management and leadership

The informants felt after their master's degree studies that the Government that had supported the programme neglected education as a career path. When realizing this, the graduates tried to find other ways to use their knowledge and skills. For example, one informant reported:

"I am thinking of establishing a new NGO (Non-Government Organization) to help mothers in need. I am going to focus on Sexual and Reproductive Health and Rights for disabled mothers." (Informant, E)

Other comments echoed these thoughts. The informants felt that a management position would enable them to make changes in society regarding SRHR. Based on experience, however, it was more challenging than they had expected to utilize their management and leadership skills.

"UNFPA and the Ministry of Health recruited me as Vice Chancellor for the midwifery school. We prepared the school, but still we are waiting for the budget, waiting to start." (Informant, J)

Context-bound career paths were, according to the informants, based on personal relations, power relations and tribal issues rather than on educational level. The perception was that it was not always the most skilled or educated person who held the management position. Therefore, as well-educated professionals, they were sometimes treated negatively because they were a threat to individuals already in management positions.

"If education and knowledge were to be respected, the one holding the position who does not have an education and who does not have the knowledge would lose that position. Traditional career

paths, you know: that is why we do not get registered in the government pay roll." (Informant, K)

Respect in society

The informants emphasized how they had gained the respect of students and colleagues at the universities and clinical sites.

"The dean of the informant introduced me. He said, 'This is Fathma. She is a nurse and a midwife, she is an informant.' So also midwifery SRHR informant staff and the students welcomed me, and they gave me respect and they understood I have more knowledge than them." (Informant, L)

They also believed that the expectations placed on them were high. They felt that they would be satisfied in terms of their hopes for career-path opportunities in the future.

"They (the university) started a research methodology course with supervision from America. So we teach the senior nursing/midwifery students. We have great admiration for this." (Informant, O)

It became apparent during the programme that the informants themselves had high expectations when it came to the programme serving as a career step. Eight months after graduation, their expectations were more realistic in the Somaliland context.

"Before I worked as a nurse/midwife, I got a position as community health coordinator in my own association. A slightly higher position. I have also become a nurse tutor in different universities, so these are positive things." (Informant, M)

Discussion

One of the key findings in this study is that online higher education is beneficial to female well-educated professionals who have family responsibilities and who want to study and move up the career ladder. Midwifery is a female-dominated profession and gender inequalities have been noted to be a major concern when it comes to midwifery as an independent profession and to the provision of quality midwifery care. In a systematic mapping from the providers' perspective in low- and middle-income countries, [Filby et al. \(2016\)](#) highlight social, cultural, economic and professional barriers that prevent the provision of quality midwifery care. These authors proposed an analytic framework that shows how these barriers are initiated and reinforced by gender inequity. They conclude that there is an urgent need for issues of gender inequality and rights that underlie the barriers to be dealt with ([Filby et al., 2016](#)). From a gender-equality perspective, online higher education is therefore an important career path particularly for midwives. Midwives are often women who cannot easily travel the roads or be away from their families ([Filby et al., 2016](#)). Innovative approaches to midwifery training and a career path for midwives have therefore been proposed ([Noonan, 2013](#); [Reis et al., 2015](#)). In a net-survey that recorded the perceptions of nursing/midwifery leaders when it came to important innovative competencies, the authors concluded that there is a significant gap in innovation competencies among nursing/midwifery leaders in practice and academia with underlying gender inequality ([Filby et al., 2016](#)). However, the way we teach innovation needs to involve closer collaboration between academia and practice ([White et al., 2016](#)).

Innovative approaches have also explored didactics, the relationship between mind-mapping, critical thinking and long-term recall of information (Noonan, 2013). An online master's programme is in line with documented innovative approaches for healthcare leaders (White et al., 2016), where tools are provided to promote innovative approaches to assignments and the critical thinking skills that are essential for clinical practice.

Further, our study identified professional development because of the online master's programme. The informants own way of preparing lectures and courses changed. After their graduation, their teaching came to be about students meeting the particular learning outcomes and objectives of a course through various activities in various assignments. Additionally, the informants updated their topics with more recent evidence on midwifery care. According to White et al. (2016), the preferred innovative teaching methods were case studies of failures and successes and, furthermore, project- and field based approaches. Traditional lectures were the least preferred method for addressing competency gaps in terms of innovation.

Our experience is that they all (streamed, pre-recorded lectures and online seminars) had their place in the online programme. In a review of how to improve healthcare performances in clinical settings, it was found that when clinicians engage in research and projects, there was a likelihood of a positive impact on healthcare performance (Hanney et al., 2013). Therefore, the informants actually set an example for midwifery practice when they remained at the workplace while gathering data for their master's thesis. The perception of the informants in this study was that upon completion of the programme, they better understood how the gap between theory and practice could be reduced in their own theoretical teaching and clinical supervision.

Midwives and also midwifery students are, according to recent studies, well-positioned for innovation in the delivery of healthcare, although innovation is not generally learned in formal education (Arbour et al., 2015; Phillips et al., 2013; White et al., 2016). The utilization of online learning therefore gives hope to the younger generation of midwifery educators and leaders to actually use these online tools to increase the number of faculty and midwives, and to provide career paths even in hard-reached areas. In a case study from Ghana, the role of Next Generation Learning (NGL) for basic emergency in midwifery pre-service education was evaluated. The plan is now to scale it up. Key success factors were delivery online and offline, free of charge, broad stakeholder support, an established curriculum, and students' and tutors' interest (Brown and McCororie, 2015). Our experience is that ambition and interest from tutors, faculty as well as stakeholders are important factors. The main source of frustration for the graduates was the non-appreciation on the part of hospital managers for their knowledge and ability to identify gaps and areas of improvement in clinical settings. The graduates found their ability to think critically was given little value. This frustration has us once again considering the urgent need to actively deal with gender inequality and issues of rights that underlie the barriers for midwives to work and gain respect for the work they do, and in turn we know this affects quality maternity care (Filby et al., 2016). In order to give voice to midwives, advocacy for the midwifery profession (Renfrew et al., 2014) and health policy education is a way forward. Health policy education has been provided online to post-graduate midwives (Lichtman et al., 2015; Van Hoover, 2015). Advocacy for the midwifery profession by Massive Open Online Courses (MOOC) (Power and Coulson, 2015; Renfrew et al., 2014) is suggested. Such courses influencing the critical mass of leaders, managers and politicians might in turn influence gender inequalities in society (Filby et al., 2016). It is known that education can contribute to changes at a personal level for women. In this study, also the male

informants supported women's empowerment after the graduation.

In particular, the utilization of the Internet to search for information and to write up applications with relevant content was appreciated at a personal level by the informants in this study. To ensure sustainability of exposure to best practice and evidence after graduation, those included in the master's program until one year after the graduation got access to the Dalarna University library. For sustainability literature, searching skills were developed for open access e-books and scientific articles. Searching for best practice and latest evidence online was an ongoing activity in every assignment and for the thesis writing itself. The university initiated HINARI and an ethical board at the local universities to serve the broad mass of nursing and midwifery students and faculty. The informants witnessed how not only the data base search but also the use of the Internet opened the world to them when they themselves needed medical advice as has been described in a study from Australia (Lupton, 2016).

Reciprocal learning and cultural humility was the leading principal in the master's program. The positive aspects of the informant's own culture and ways of teaching was affirmed through reflexive learning, that means in mutual understanding and trust thinking critically and discussing in class. The programme was with this approach for instance a revelation for inequalities in terms of human rights. Frustration developed among the graduates when they realized how context-bound career paths were based on personal relations, gender, power relations and tribal issues rather than on level of education. The newfound critical thinking skills also created a dilemma of frustration when for instance perceiving needs to do as they were told. They found it hard to reconcile and started to search for other job opportunities in such situations. A shift of generation and management structure they believed was a potential way forward for Somaliland in this regards. This illustrated the reality in any weak state system, as addressed by Lichtman et al. (2015). Education, regulation and the work of an association are intertwined in political decisions (ICM, 2008; 2010; 2013) in any nation. The pilot on-line master's education have an alignment with the principles of ICM and we believe as an organization they can support improvements online teaching and learning, in order to increase the number of well-trained midwives providing quality maternity care to women and new-borns (Renfrew et al., 2014).

Limitations

The main limitation of this study is that the research team consisting of former teachers in the master's training, from both Somaliland and Swedish Universities, were involved in data gathering and analysis. Credibility was threatened if the researcher believed the master's education had been effective without taking into consideration the importance of bridling own prior understanding. Credibility address if we were to be able to record the informants' perceptions and presenting then in a trustworthy way. Consideration to the treath against trustworthiness was given to the possibility that the Somaliland informant would be influenced by expectations to provide positive responses to the moderator during the focus groups. To avoid this treath to trustworthiness the focus groups was arranged eight months after graduation of the master's program. This lent the informants freedom to express themselves without considering for instance grading in the masters' program. They were well-educated professionals with autonomy. The focus groups were arranged during the last travel the Swedish faculty made to Somaliland. The informants knew they would most probably never meet with the Swedish faculty again and this lent the study credibility, despite the treath.

The seven steps of analysis might make it appear sequential rather than iterative, however it was a structured way to deal with Marton's (1986, p 43) description and added credibility to the analysis process. After the analysis was finished, the focus group interviews were re-read through by all authors and one informant to ensure that the voice of the informants was reflected in the descriptions. A thoughtful member checking by one informant re-reading through was considered the best way to lend the study credibility through membership checking. The results were in line with other studies, and usually this fact is contributing to the study's trustworthiness (Polit and Beck, 2012). In this discussion, section much of the literature cited relates to research conducted in the western context, which may or may not be relevant to the Somalian context. However, with knowledge and experience from the context the research team found the cited literature relevant. For instance, what White et al. (2016) found in a North American study that traditional lectures are the least preferred method for addressing competency gaps in terms of innovation, is relevant in the Somaliland context. From the perspective that this was the first ever master's programme in SRHR in Somalia, this study, despite its limitations, is important because it adds to the global literature on gender equity and education.

Conclusion

Online information helps achieve rights for well-educated professional women. Online education makes it possible for them to study higher education programs and courses, and improves their confidence in the use of the Internet, software and academic databases. It furthermore increases the opportunities for midwives and midwifery faculty to incorporate evidence into both their teaching, information and their clinical practice.

Because of education at the master's level, the midwifery informant gained a position of greater respect in society and experienced positive outcomes in terms of professional and personal development although inequity remained as evidenced by frustration at the lack of acknowledgement from managers. We hope that programmes such as the one described in this paper could counter the difficulties ensuring best practice by having a critical mass of midwives and midwifery faculty who will be able to continually gather contemporary midwifery evidence and use it to ensure best practice. A further proposal is to initiate online master's programme in South-central Somalia and similar settings elsewhere in the world.

Conflict of interest

None.

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